

# Home Energy fact sheet NSW

## Winter Energy Consumption

This fact sheet has been developed as a guide to help you understand energy consumption in your home.

In periods of extreme temperatures or exceptional circumstances you place greater demands on your household appliances and consequently use more energy.

On the reverse of this fact sheet you'll find a table that examines typical household energy consumption and identifies key

appliances that may be responsible for higher electricity usage. You'll also find handy hints and tips for cutting back on your energy use to save you money.

By following the steps below we hope that you'll gain a greater understanding of the running costs of the appliances in your home and reduce your household consumption, saving energy and the environment.

### 1. Compare

Compare your electricity account with the information in the graph below. This will help you evaluate your consumption compared to the average Origin New South Wales household.

Typical Quarterly Electricity Account  
July 2006 - September 2006



Origin advises that the information set out in this document is indicative only and should not be relied upon as being final and accurate.

### 2. Monitor

To understand your daily energy consumption levels you may wish to monitor your electricity meter.

By reviewing the meter over several days, you should be able to establish your daily average consumption.

In recording your daily consumption measurements be aware of any severe temperature fluctuations.

In this instance you may see a spike in your energy usage, particularly if you are running heaters, clothes dryers, extra lighting or air conditioners for extended periods.

### 3. Test

#### Identifying high electricity consumption appliances:

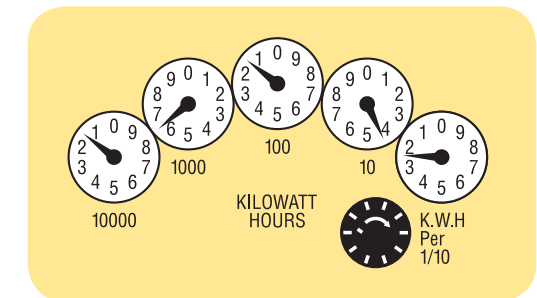
- Turn off the mains in your meter box.
- Read and make note of your electricity meter reading.
- Turn off all appliances\* connected to the tariff in question with the exception of the appliance that you wish to measure. Refer over to see which appliances may be connected to specific tariffs.
- Turn mains on.
- Read meter after one hour – this will give you an indication of how much energy that appliance is using.
- Once these high energy usage appliances have been identified you can refer to the table overleaf to see how you could reduce energy usage. Alternatively you may decide the appliance needs to be repaired or replaced.

\*Do not turn off in-use refrigeration for more than one hour

## How to read a dial type electricity meter

The dial type meter is the most commonly installed meter in New South Wales. Stand directly in front of the meter so that you can see the exact position of the pointers. Start at the right hand dial and record the number the pointer has just passed on each dial.

To check your average daily consumption, take readings at the same time of the day, several days apart.



The reading from the above dials is 16142

Record your readings in the boxes below.

10000s	1000s	100s	10s	Units



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Appliance (Estimated use)	Estimated typical Origin household winter use	Approximate running costs - winter quarter			Possible reasons for high energy consumption	Suggested remedy												
<b>Air conditioning units</b> 7 hrs/day x approx 63 days minimum temperature no higher than 12°C Estimated compressor use: *Standard type - 50% ** Inverter type - 35% *** Inverter type - 120%		<b>Domestic Tariff GL &amp; P</b>			<ul style="list-style-type: none"> <li>Doors and windows left open at night</li> <li>No curtains or blinds on large glass areas</li> <li>Long operating times</li> <li>Too warm thermostat temperatures set</li> <li>Very cold temperatures (lower than 10°C)</li> <li>Unit expected to heat too large an area</li> <li>Lack of ventilation to outdoor unit</li> <li>Clogged filters on indoor unit</li> </ul>	<ul style="list-style-type: none"> <li>Allow the sun to come in during daylight hours to warm the home</li> <li>Cover large glass areas at night (Thermal layer helps stop cold entering via glass).</li> <li>Set rules (i.e. use ac when temps reach x °C and always dress to suit the weather)</li> <li>Set temp no higher than 8 °C higher than outside temperatures</li> <li>Turn ac on before the house gets cold</li> <li>Close off some areas to contain conditioned air</li> <li>Remove obstructions</li> <li>Clean filters regularly</li> </ul>												
		<b>Standard*</b>	<b>Inverter**</b>	<b>Max***</b>														
	Bedroom sized - 2.5kW output / 1 kW input	\$54	\$38	\$139														
	Lounge/dining room sized - 5 kW output / 2 kW input	\$108	\$75	\$259														
	Typical zoned ducted - 14 kW output / 5.5 kW input	\$296	\$207	\$711														
<b>Electric space heaters</b> 7 hrs/day x approx 63 days minimum temperature no higher than 12°C	1 kW (1000 Watt)	\$108			<ul style="list-style-type: none"> <li>Multiple heaters used simultaneously for long periods in various rooms throughout the home</li> </ul> NB: Remember to calculate for each heater used	<ul style="list-style-type: none"> <li>Use timers to automatically turn units off after set period of time</li> </ul>												
	2 kW (2000 Watt)	\$216																
	2.4 kW (2400 Watt)	\$259																
<b>Lighting</b> 5 hours / day	6 x 100 W incandescent	\$48			<ul style="list-style-type: none"> <li>Lights left on</li> </ul>	<ul style="list-style-type: none"> <li>Turn unused lights off / replace with compact fluoroescents / install timers and use lamp lights</li> </ul>												
	6 x 20 W compact fluoroescents	\$10																
<b>Spa</b> 12 hrs / week (Temp rise - 5°C / hr)	5 kW heater 500 - 1000 Litre	\$135			<ul style="list-style-type: none"> <li>Spa left on for lengthy periods</li> </ul>	<ul style="list-style-type: none"> <li>Turn off and unplug when not in use for some time</li> </ul>												
<b>Water Pumps</b> 3 hrs / day	0.55 kW pump 40 litres / min / 140 kPa	\$26			<ul style="list-style-type: none"> <li>Pump running continuously</li> </ul>	<ul style="list-style-type: none"> <li>Turn off and unplug when not in use for some time</li> </ul>												
<b>Swimming Pool Filter</b> 2 hrs / day	1.1 kW pump	Domestic Tariff GP & P		\$35	<ul style="list-style-type: none"> <li>Pump or chlorinator continuously running</li> <li>Faulty or no timer setting</li> </ul>	<ul style="list-style-type: none"> <li>Seek advice from pool experts</li> <li>Consider viability to connect pool filter to Tariff 33</li> </ul>												
<b>Hot water systems</b> 9-10 kWh per day	Storage electric system average size 250 litres	Domestic Tariff GP & P		\$127 - \$143	<ul style="list-style-type: none"> <li>Very cold season</li> <li>More people in the household</li> <li>More hot water consumed</li> <li>Faulty thermostat</li> <li>System leaking</li> </ul>	<ul style="list-style-type: none"> <li>Using ceiling installation type bathroom heaters to aid short showering time</li> <li>Install AAA rated shower fittings</li> <li>Connect appliances to cold water only (dishwasher, washing machine)</li> <li>Call repairman if required</li> <li>Research most suitable new unit before purchasing replacement unit</li> </ul>												
		Off-Peak Tariff 2		\$68 - \$77														
		Off-Peak Tariff 1		\$44 - \$50														
<b>Standby power</b> Estimated use 24hrs /day (92 days)  Various appliances consume power even when you are not using them.  Passive standby mode can be detected as a light, clock or perhaps the unit is simply waiting to be activated by a remote control unit.  Active standby is when the unit is ON but not performing its main function.  Source: Energy Efficient Strategies 2005  Calculations based on most common mode appliances found using during 2005 intrusive household study	Domestic Tariff GP & P																	
	Mode	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13	\$14	\$15	\$16	\$17
	Passive Standby	Computer																
	Passive Standby	Laptop																
	On	Set Top Box																
	Passive Standby	Plasma TV																
	Passive Standby	CRT TV																
	Passive Standby	Computer Monitor																
	Passive Standby	Stereo - intergrated																
	Active Standby	Modem																
	Active Standby	Remote Garage Door Opener																
	Passive Standby	DVD/VCR unit																
	Passive Standby	Surround Sound Amplifier																
	Active Standby	Cordless Phone Base Station																
Passive Standby	Microwave Oven																	
Active Standby	Dishwasher																	
Passive Standby	DVD Player																	
Passive Standby	LCD Monitor																	
Passive Standby	Play Station/Games Console																	
					<b>Possible reasons for high standby related energy consumption</b> <ul style="list-style-type: none"> <li>Appliances left on at the wall when not in use</li> </ul> NB: Some appliances must be left on 24x7: <ul style="list-style-type: none"> <li>Set Top Box</li> <li>Cordless Phone Base Station</li> <li>Remote Garage Door Opener</li> </ul>													
					<b>Suggested remedy</b> <ul style="list-style-type: none"> <li>Turn off and unplug when not in use for some time</li> <li>When purchasing new appliances consider value of Standby Power component</li> </ul>													